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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/765,132

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Patrick Blanc

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EXAMINER

LOFTIN, CELESTE

ART UNIT

PAPER NUMBER

2686

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/765,132	BLANC ET AL.	
	Examiner	Art Unit	
	Celeste L. Loftin	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to because of the following informalities: It is not clear what is being claimed when using the limitation "(handover)". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,2, 9-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasan et al. (Hasan), **WO/0131963** in view of Soininen et al. (Soininen), **U.S. Publication 10,482,047**.

Regarding claim 1, Hasan discloses a cellular mobile radio system comprising second generation cells and third generation cells (reads on a method of handling over a mobile terminal from a second generation circuit switched network to a third generation all IP based network) (**page 4 lines 6-13**), the method determines whether a change of cell to a third generation cell is possible (reads on as the caller enters an area of 3G coverage the decision to perform a handover must be made) (**page 5 lines 11-16**) and, if so, effects said change of cell in order to allow said circuit and packet connections simultaneously in a third generation cell (after the HLR verifies that the user has a 3G subscription, an anchor GGSN and a properly located SGSN is chosen to

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service the MT after the handover (whenever there are pockets of 3G coverage with in a 2G coverage area it may be reasonably assume that initial 3G deployment will be in islands of 3G coverage with an already installed 2G coverage are) **(page 5 lines 8-21)**.

Hasan fails to disclose a method for simultaneous access to circuit services and packet services in, in which method, if a packet or a circuit connection is required by a terminal already having a circuit or a packet connection set up in a second generation cell.

In a similar field of endeavor, Soininen discloses a method for simultaneous access to circuit services and packet services in, in which method, if a packet or a circuit connection is required by a terminal already having a circuit or a packet connection set up in a second generation cell (Ann is initiates a call and the RCA determines that a circuit switched connection is best, then Bob decides to open a whiteboard session and the RCA determines that parallel (i.e. simultaneous) circuit switched and packet switched connection should preferably be used) **(paragraph [0033] and [0035])**.

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify Hasan to include a method for simultaneous access to circuit services and packet services in, in which method, if a packet or a circuit connection is required by a terminal already having a circuit or a packet connection set up in a second generation cell. Motivation for this modification would have been to provide a coherent user experience (paragraph [0027]).

Regarding claim 2, the combination discloses a method according to claim 1. Hasan further discloses wherein the network determines if said change of cell is possible (reads on as the caller enters an area of 3G coverage the decision to perform a handover must be made) **(page 5 lines 11-16)**.

Regarding claim 9, the combination discloses a method according to claim 1. Hasan further discloses wherein, when said change of cell has been effected, the network (i.e. the HLR/HSS is a part of the 3G network) **(see figure 1 element 14)** initiates automatic setting up of the connection in said third generation cell by sending the terminal a paging message (the HLR/HSS verifies that the user has a 3G subscription and chooses an Anchor GGSN and a properly located SGSN to service the MT after the handover) **(page 5 lines 15-21)**.

Regarding claim 10, the combination discloses a method according to claim 9. Hasan further discloses wherein, when executing said change of cell, said second generation cell sends said third generation cell information necessary for automatically initiating setting up of the connection by the network (the MT periodically scan for 3G coverage and when it is detected the MSC sends the "3G handover message" (contains the IMSI of the MT) to the 3G HLR) **(page 8 lines 4-11)**.

Regarding claim 11, the combination discloses a method according to claim 1. Hasan discloses wherein, when said change of cell has been effected, the terminal initiates setting up the connection in said third generation cell (after handover is completed the 3G service trigger launches pre-registration (a service that is initiated by the MT)) **(page 6 lines 13-25)**.

Regarding claim 14, Hasan disclose a mobile radio system core network equipment including means for implementing a method according to claim 1 (reads on since the exemplary scenario involves handover to a 3G system the HLR (i.e. the core network equipment) selects an SGSN ahead a time for the call) (**page 6 lines 28-31**).

4. Claims 3-8 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasan et al. (Hasan), **WO/0131963** in view of Soininen et al. (Soininen), **U.S. Publication 10,482,047** in further view of Ahmavaara et al (Ahmavaara), **U.S. Publication 10,276,827**.

Regarding claim 3, the combination discloses a method according to claim 1.

Hasan discloses if said connection already set up in a second-generation cell (the MT scans for 3G coverage but there is none, so the subscriber makes a 2G voice call and at a later time detects a 3G signal) (**page 6 lines 13-18**).

Hasan fails to disclose if said connection already set up is a circuit connection and said change of cell is an intercellular transfer (handover).

Soininen further discloses if said connection already set up is a circuit connection (RCA decides that a CS connection is preferred, then when another terminal initiates a whiteboard session the RCA decides that parallel connection is desirable between CS and PS) (**paragraph [0033] and [0035]**). Soininen fails to disclose said change of cell is an intercellular transfer (handover).

In a similar field of endeavor, Ahmavaara discloses said change of cell is an intercellular transfer (handover) (reads on an intersystem change from the UMTS to the GPRS handover for simultaneous CS and PS) (**paragraph [0038]**).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include a second-generation cell is a circuit connection, said change of cell is an intercellular transfer (handover). Motivation for this modification would have been to provide a cost-effective handover procedure.

Regarding claim 4, the combination discloses a method according to claim 1.

Hasan discloses if said connection already set up in a second-generation cell (the MT scans for 3G coverage but there is none, so the subscriber makes a 2G voice call and at a later time detects a 3G signal) **(page 6 lines 13-18)**.

Hasan fails to disclose if said connection already set up is a packet connection and said change of cell is an intercellular transfer (handover).

Soininen further discloses wherein if said connection already set up is a packet connection (reads on since the terminals are already engaged in a PS call) **(paragraph [0041])**.

Soininen fails to disclose said change of cell is an intercellular transfer (handover).

In a similar field of endeavor, Ahmavaara discloses said change of cell is an intercellular transfer (handover) (reads on an intersystem change from the UMTS to the GPRS handover for simultaneous CS and PS) **(paragraph [0038])**.

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include a second-generation cell is a circuit connection, said change of cell is an intercellular transfer (handover). Motivation for this modification would have been to provide a cost-effective handover procedure.

Regarding claim 5, the combination discloses a method according to claim 1. Soininen discloses wherein the terminal signals to the network that a packet or a circuit connection is required simultaneously with a circuit or a packet connection that is already set up and (RCA decides that a CS connection is preferred, then when another terminal initiates a whiteboard session the RCA decides that parallel connection is desirable between CS and PS) (**paragraph [0033] and [0035]**). Soininen fails to disclose on receiving said signaling, the network determines if said change of cell is possible.

In a similar field of endeavor, Ahmavaara discloses on receiving said signaling, the network determines if said change of cell is possible (the UTRAN decides to perform an intersystem change however the initiation of the handover procedure may be triggered by the mobile station) (**paragraph [0041]**).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include on receiving said signaling, the network determines if said change of cell is possible. Motivation for this modification would have been to provide a cost-effective handover procedure.

Regarding claim 6, the combination discloses a method according to claim 5. Soininen discloses wherein the terminal signals to the network that a packet connection is required simultaneously with a circuit connection that is already set up by sending the network a request to operate in dual transfer mode (RCA (located in the terminal (*see figure 2 element 21*)) decides that a CS connection is preferred, then when another

terminal initiates a whiteboard session the RCA decides that parallel connection is desirable between CS and PS) (**paragraph [0033] and [0035]**).

Regarding claim 7, the combination discloses a method according to claim 6.

Soininen further discloses a mobile terminal supporting simultaneous circuit services and packet services and having a circuit connection already set up in said cell signals to the network that a packet connection is required by sending the network a request to operate in dual transfer mode (RCA (located in the terminal (*see figure 2 element 21*)) decides that a CS connection is preferred, then when another terminal initiates a whiteboard session the RCA decides that parallel connection is desirable between CS and PS) (**paragraph [0033] and [0035]**).

Soininen fails to disclose wherein a second generation cell not supporting simultaneous circuit services and packet services signals falsely to mobile terminals in said cell that it supports simultaneous circuit services and packet services (a mobile station may initiate a GPRS routing area update procedure for intersystem handover however a mobile station in class B mode may provide simultaneous support **but** it may need to put the other connection on hold for the time it is processing other connection) (**paragraph [0037]**).

Soininen fails to disclose on receiving said signaling, the network determines if said change of cell is possible.

In a similar field of endeavor, Ahmavaara discloses on receiving said signaling, the network determines if said change of cell is possible (the UTRAN decides to perform

an intersystem change however the initiation of the handover procedure may be triggered by the mobile station) (**paragraph [0041]**).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include on receiving said signaling, the network determines if said change of cell is possible. Motivation for this modification would have been to provide a cost-effective handover procedure.

Regarding claim 8, the combination discloses a method according to claim 5. Soininen further discloses wherein the terminal signals to the network that a circuit connection is required simultaneously with a packet connection that is already set up (terminals are already engaged in PS a call and it is assumed that the adaptation layer decides that a CS bearer should be used and the CS call is then established at the same time) (**paragraph [0041], [0042], and [0043]**) by sending the network a packet session suspension request (a mobile station may also provide simultaneous support for the packet switched and circuit switch connections, it may need to put the other connections on hold) (**paragraph [0037]**).

Regarding claim 12, the combination fails to discloses a mobile radio system mobile terminal including means for implementing a method according to claim 1.

In a similar field of endeavor, Ahmavaara discloses a mobile radio system mobile terminal including means for implementing a method according to claim 1 (reads on the UR may comprise a mobile station that is adapted to communicate via the BTS of the GMS system and also via the Node B of the UMTS system) (**paragraph [0029]**).

At the time of invention it would have been obvious to one of ordinary skill in the

art to further modify the combination to include a mobile radio system mobile terminal including means for implementing a method according to claim 1. Motivation for this modification would have been to provide a cost-effective handover procedure.

Regarding claim 13, the combination fails to disclose a mobile radio system radio access network equipment including means for implementing a method according to claim 1.

In a similar field of endeavor, Ahmavaara discloses a mobile radio system radio access network equipment including means for implementing a method according to claim 1 (reads on the mobile station moves from one cell to another cell there is a need to hand the mobile station over from communication with the base station and associated network apparatus) (**paragraph [0031]**).

At the time of invention it would have been obvious to one of ordinary skill in the art to further modify the combination to include a mobile radio system radio access network equipment including means for implementing a method according to claim 1. Motivation for this modification would have been to provide a cost-effective handover procedure.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nikkelen, U.S. Publication 2003/0207688 A1, discloses service-based intersystem handover.

Faerber et al., U.S. Publication 2003/0153313 A1, discloses a method for controlling intersystem link transfer.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celeste L. Loftin whose telephone number is 571-272-2842. The examiner can normally be reached on Monday thru Friday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CL


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PATENT EXAMINER